

REMARKS

Claims 34 and 36 through 44 are pending in this Application and have been rejected. For reasons set forth *infra*, Applicants submit that the Examiner's imposed rejections are not factually or legally viable and should be withdrawn.

Claim 34 was rejected under 35 U.S.C. § 103 for obviousness predicted upon Kumagai in view of Cherne.

In the statement of the rejection, the Examiner referred to Figs. 5A-5C of Kumagai, asserting the disclosure of a semiconductor device comprising, *inter alia*, first and second active regions electrically isolated from each other by a perfect isolation region 13. The Examiner **admitted** that the perfect isolation region 13 is not in contact with isolating layer 14, omitting the obvious fact that there is no need for such contact. Nevertheless, the Examiner concluded that one having ordinary skill in the art would have been motivated to modify Kumagai's semiconductor device by extending the perfect isolation region 13 down to isolating layer 14, in view of Cherne. This rejection is traversed.

In order to establish the requisite fact-based realistic motivation, the Examiner is required to make clear and particular factual findings as to a specific understanding or specific technological principle and then, based upon such facts, explain why one having ordinary skill in the art would have been realistically impelled to modify **particular prior art**, in this case the **specific** semiconductor device disclosed by Kumagai, to arrive at the claimed invention. *In re Lee*, 237 F.3d 1338, 61 USPQ2d 1430 (Fed. Cir. 2002); *Ecolchem Inc. v. Southern California Edison, Co.*, 227 F.3d 1361, 56 USPQ2d 1065 (Fed. Cir. 2000); *In re Kotzab*, 217 F.3d 1365, 55 USPQ 1313 (Fed. Cir. 2000); *In re Dembiczak*, 175 F.3d 994, 50 USPQ2d 1614 (Fed. Cir.

1999). Generalizations are not sufficient. *In re Rouffet*, 149 F.3d 1350, 47 USPQ2d 1453 (Fed. Cir. 1998). Moreover, not only must the prior art provide the requisite basis for the motivational element, the motivation must be undertaken with a reasonable expectation of success and that reasonable expectation of success must stem from the applied prior art as well. *Velandier v. Garner*, 348 F.3d 1359, 68 USPQ2d 1769 (Fed. Cir. 2003); *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

In applying the above legal tenets to the facts of this case, it is apparent the Examiner did not establish the requisite fact-based motivation and, hence, did not establish a *prima facie* basis to deny patentability to the claimed invention under 35 U.S.C. § 103. Specifically, the Examiner's assertion that Cherne would have motivated one having ordinary skill in the art to modify the particular device of Kumagai by extending the perfect isolation region 13 down to isolating layer 14 "... to completely isolate the NP type devices from each other" (ultimate sentence of the paragraph bridging pages 3 and 4 of the March 21, 2006 Office Action) is nothing more than a generalization and simply doesn't fit the facts of this case. *In re Rouffet, supra*. This is because each of the applied references relates to completely different types of devices. In this respect Applicants point out that Cherne relates to a mesa structure involving two CMOS regions isolated by trench oxide layer 41 which fills the trench pattern around the mesas. However, in the structure disclosed by Kumagai, the primary reference, there is **no apparent need** to extend the isolation region 13. **This is because the transistors of different conductivity types are built into wells having different conductivity.** So to begin with, they are completely isolated from each other. There is no need to extend isolation region 13 down to isolating layer 14. To say that isolation region 13 must be extended to isolating layer 14 is tantamount to asserting that Kuamgai's device is inoperative.

Based upon the foregoing it should be apparent that a *prima facie* basis to deny patentability to the claimed invention under 35 U.S.C. § 103 has not been established for lack of the requisite fact-based motivation. Applicants, therefore, submit that the imposed rejection of claim 34 under 35 U.S.C. § 103 for obviousness predicated upon Kumagai in view of Cherne is not factually or legally viable and, hence, solicit withdrawal thereof.

Claims 36 and 37 were rejected under 35 U.S.C. § 103 for obviousness predicated upon Kumagai in view of Cherne and Ogoh.

Claims 38 through 40 were rejected under 35 U.S.C. § 103 for obviousness predicated upon Kumagai in view of Cherne and Nagakubo et al.

Claims 41 through 44 were rejected under 35 U.S.C. § 103 for obviousness predicated upon Kumagai in view of Cherne, Nagakubo et al. and Yatsuda et al.

Each of the above rejections of claims 36 and 37, 38 through 40 and 41 through 44 is traversed. Specifically, each of these rejected claims depend from independent claim 34. Applicants incorporate herein the arguments previously advanced in traversing the imposed rejection of claim 34 under 35 U.S.C. § 103 for obviousness predicated upon Kumagai in view of Cherne. None of the additional references to Ogoh, Nagakubo et al. and Yatsuda et al. cures any of the previously argued deficiencies in the attempted combination of Kumagai and Cherne.

Applicants, therefore, submit that the imposed rejection of claims 36 and 37 under 35 U.S.C. § 103 for obviousness predicated upon Kumagai in view of Cherne and Ogoh, the imposed rejection of claims 38 through 40 under 35 U.S.C. § 103 for obviousness predicated upon Kumagai in view of Cherne and Nagakubo et al., and the imposed rejection of claims 41 through 44 under 35 U.S.C. § 103 for obviousness predicated upon Kumagai in view of Cherne,

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Nagakubo et al. and Yatsuda et al., are not factually or legally viable and, hence, solicit withdrawal thereof.

Based upon the foregoing it should be apparent that the imposed rejections have been overcome and that all pending claims are in condition for immediate allowance. Favorable consideration is, therefore, solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP


Arthur J. Steiner
Registration No. 26,106

600 13th Street, N.W.
Washington, DC 20005-3096
Phone: 202.756.8000 AJS:as/bjs/ntb
Facsimile: 202.756.8087
Date: June 20, 2006

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